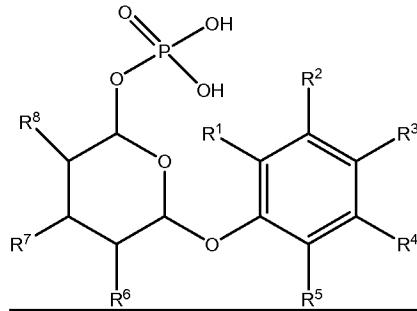


Amendments to the Claims

1. (Original) A phosphate derivative of a phenolic hydroxy compound comprising the reaction product of the following steps:
 - (a) reacting the phenolic hydroxy compound with an alkyl $\alpha:\omega$ dialdehyde or a sugar-like polyhydroxy dialdehyde to form a hemiacetal;
 - (b) reducing the terminal aldehyde group on the product from step (a) to a hydroxyl group; and
 - (c) phosphorylating the hydroxyl group formed in step (b) to produce a phosphate derivative of the phenolic hydroxy compound.

2. (Cancelled)

3. (Currently amended) The phosphate derivative of a phenolic hydroxy compound according to claim 1 having the structure of Compound (II)



wherein R¹, R², R³, R⁴ and R⁵ ~~may~~ are each independently ~~be chosen from~~ H or an alkyl group and R⁶, R⁷ and R⁸ ~~can~~ are each independently ~~be~~ H or OH.

4. (Currently amended) The phosphate derivative of a phenolic hydroxy compound according to claim 1 wherein the product of step (c) ~~has been~~ is reacted with a complexing agent selected from the group ~~comprising amphoteric surfactants, cationic surfactants, amino acids having nitrogen functional groups and proteins rich in these amino acids consisting of arginine or a substituted amine of the following formula:~~



~~wherein R⁹ is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C₆ to C₂₂ and carbonyl derivatives thereof, and~~

R¹⁰ and R¹¹ are chosen independently from the group comprising H, -CH₂(CO)OX, -CH₂CH(OH)CH₂SO₃X, -CH₂CH(OH)CH₂OPO₃X₂, -CH₂CH₂COOX, -CH₂CH₂CH(OH)CH₂SO₃X or -CH₂CH₂CH(OH)CH₂OPO₃X₂, wherein X is H, Na, K or alkanolamine provided R¹⁰ and R¹¹ are not both H; and

wherein when R⁹ is R⁹(CO), wherein R⁹ is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and R¹⁰ is -CH₃ and R¹¹ is -(CH₂CH₂)N(CH₂CH₂(OH))CH₂PO₃H or R¹⁰ and R¹¹ are independently -(CH₂)₂N(CH₂CH₂(OH))CH₂(CO)OX, wherein X is H, Na, K or alkanolamine.

5. (Currently amended) The phosphate derivative of a phenolic hydroxy compound according to claim 1 wherein the phenolic hydroxy compound is propofol or a derivative of propofol.

6. (Currently amended) The phosphate derivative of a phenolic hydroxy compound according to claim 5 wherein ~~the phosphate derivative of propofol has been~~ reacted with a complexing agent selected from the group ~~comprising amphoteric surfactants, cationic surfactants, amino acids having nitrogen functional groups and proteins rich in these amino acids~~ consisting of arginine or a substituted amine of the following formula:



wherein R⁹ is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and

R¹⁰ and R¹¹ are chosen independently from the group comprising H, -CH₂(CO)OX, -CH₂CH(OH)CH₂SO₃X, -CH₂CH(OH)CH₂OPO₃X₂, -CH₂CH₂COOX, -CH₂CH₂CH(OH)CH₂SO₃X or -CH₂CH₂CH(OH)CH₂OPO₃X₂, wherein X is H, Na, K or alkanolamine provided R¹⁰ and R¹¹ are not both H; and

wherein when R⁹ is R⁹(CO), wherein R⁹ is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and R¹⁰ is -CH₃ and R¹¹ is -(CH₂CH₂)N(CH₂CH₂(OH))CH₂PO₃H or R¹⁰ and R¹¹ are independently -(CH₂)₂N(CH₂CH₂(OH))CH₂(CO)OX, wherein X is H, Na, K or alkanolamine.

7. (Original) The phosphate derivative of a phenolic hydroxy compound according to claim 6 wherein the complexing agent is arginine.

8. (Original) The phosphate derivative of a phenolic hydroxy compound according to

claim 6 wherein the complexing agent is disodium lauryl-imino-dipropionate.

9. (Currently amended) The phosphate derivative of a phenolic hydroxy compound according to claim 1 wherein the alkyl $\alpha:\omega$ dialdehyde or a the sugar-like polyhydroxy dialdehyde is selected from the group consisting of gluteraldehyde, trihydroxy pentandial, glyoxal and mixtures thereof.

10. (Currently amended) The phosphate derivative of a phenolic hydroxy compound of claim 1 wherein the phenolic hydroxy compound is selected from the group consisting of adrenaline, analgesics, and mixtures thereof.

11. (Original) A method for preparing a phosphate derivative of a phenolic hydroxy compound comprising the steps of:

(a) reacting the phenolic hydroxy compound with an alkyl $\alpha:\omega$ dialdehyde or a sugar-like polyhydroxy dialdehyde to form a hemiacetal;

(b) reducing the terminal aldehyde group on the product from step (a) to a hydroxyl group; and

(c) phosphorylating the hydroxyl group formed in step (b) to produce a phosphate derivative of the phenolic hydroxy compound.

12. (Currently amended) The method according to claim 11 further comprising step (d) reacting the product of step (c) with a complexing agent selected from the group comprising amphoteric surfactants, cationic surfactants, amino acids having nitrogen functional groups and proteins rich in these amino acids consisting of arginine or a substituted amine of the following formula:



wherein R⁹ is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and

R¹⁰ and R¹¹ are chosen independently from the group comprising H, -CH₂(CO)OX, -CH₂CH(OH)CH₂SO₃X, -CH₂CH(OH)CH₂OPO₃X₂, -CH₂CH₂COOX, -CH₂CH₂CH(OH)CH₂SO₃X or -CH₂CH₂CH(OH)CH₂OPO₃X₂, wherein X is H, Na, K or alkanolamine provided R¹⁰ and R¹¹ are not both H; and

wherein when R⁹ is R⁹(CO), wherein R⁹ is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and R¹⁰ is

-CH₃ and R¹¹ is -(CH₂CH₂)N(CH₂CH₂(OH))CH₂PO₃H or R¹⁰ and R¹¹ are independently - (CH₂)₂N(CH₂CH₂(OH))CH₂(CO)OX, wherein X is H, Na, K or alkanolamine.

13. (Currently amended) The method according to claim 11 wherein the phenolic hydroxy compound is propofol or a derivative of propofol.

14. (Currently amended) The method according to claim 13 comprising the further step of reacting the phosphate derivative of propofol with a complexing agent selected from the group comprising amphoteric surfactants, cationic surfactants, amino acids having nitrogen functional groups and proteins rich in these amino acids consisting of arginine or a substituted amine of the following formula:



wherein R⁹ is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and

R¹⁰ and R¹¹ are chosen independently from the group comprising H, -CH₂(CO)OX, -CH₂CH(OH)CH₂SO₃X, -CH₂CH(OH)CH₂OPO₃X₂, -CH₂CH₂COOX, -CH₂CH₂CH(OH)CH₂SO₃X or -CH₂CH₂CH(OH)CH₂OPO₃X₂, wherein X is H, Na, K or alkanolamine provided R¹⁰ and R¹¹ are not both H; and

wherein when R⁹ is R⁹(CO), wherein R⁹ is chosen from the group consisting of straight or branched chain mixed alkyl radicals from C6 to C22 and carbonyl derivatives thereof, and R¹⁰ is -CH₃ and R¹¹ is -(CH₂CH₂)N(CH₂CH₂(OH))CH₂PO₃H or R¹⁰ and R¹¹ are independently - (CH₂)₂N(CH₂CH₂(OH))CH₂(CO)OX, wherein X is H, Na, K or alkanolamine.

15. (Original) The method according to claim 14 wherein the complexing agent is arginine.

16. (Original) The method according to claim 14 wherein the complexing agent is disodium lauryl-imino-dipropionate.

17. (Currently amended) The method according to claim 11 wherein the alkyl α:ω dialdehyde or a the sugar-like polyhydroxy dialdehyde is selected from the group consisting of gluteraldehyde, trihydroxy pentandial, glyoxal, and mixtures thereof.

18. – 22. (Cancelled)

23. (Currently amended) A prodrug comprising a phosphate derivative of a phenolic hydroxy compound according to claim 3 any one of claims 1 to 8 when used as a prodrug.

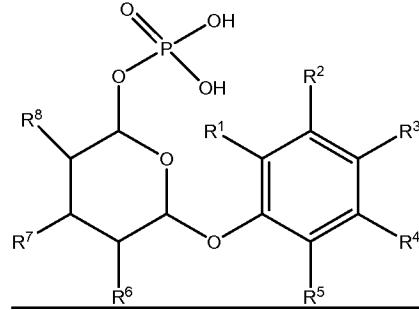
24. (Currently amended) An anaesthetic comprising a phosphate derivative of a phenolic hydroxy compound according to claim 3 any one of claims 1 to 8 when used as an anaesthetic.

25. (Currently amended) A method for improving the bioavailability of a phenolic hydroxy compound comprising the following steps:

(a) reacting the phenolic hydroxy compound with an alkyl α,ω dialdehyde or a sugar-like polyhydroxy dialdehyde to form a hemiacetal;

(b) reducing the terminal aldehyde group on the product from step (a) to a hydroxyl group; and

(c) phosphorylating the hydroxyl group formed in step (b) to produce a phosphate derivative of the phenolic hydroxy compound. having the structure of Compound (II)



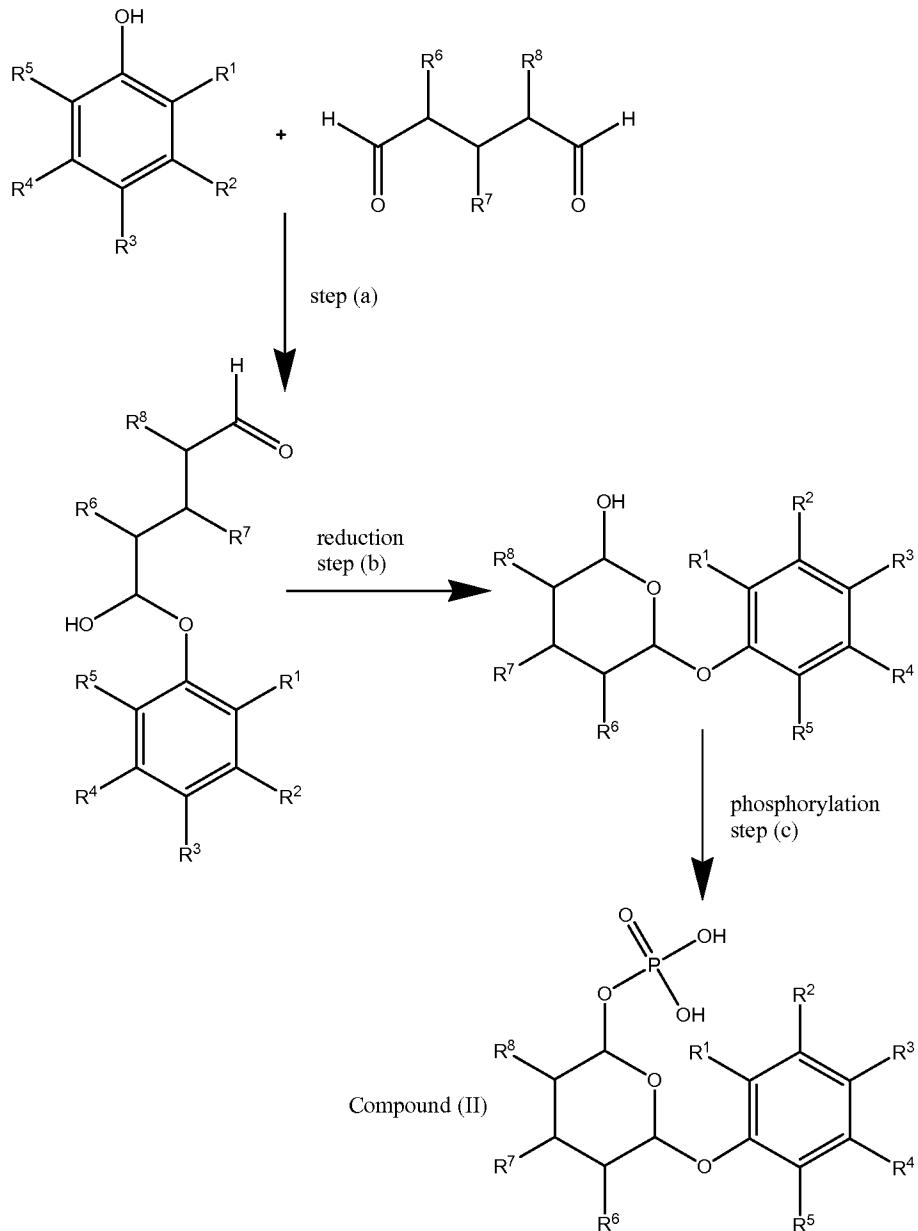
wherein R¹, R², R³, R⁴ and R⁵ are each independently H or an alkyl group and R⁶, R⁷ and R⁸ are each independently H or OH.

26. (New) The phosphate derivative of a phenolic hydroxy compound according to claim 3 wherein Compound (II) is 2-(2,6-diisopropylphenoxy)-tetrahydropyran-6-yl, dihydrogen phosphate, or 2-(2,6-diisopropylphenoxy)-3,4,5-trihydroxy tetrahydropyran-6-yl, dihydrogen phosphate.

27. (New) The phosphate derivative of a phenolic hydroxy compound according to claim 4 wherein the Compound (II) complex is arginine 2-(2,6-diisopropylphenoxy)-3,4,5-

trihydroxytetrahydropyran-6-yl dihydrogen phosphate complex, arginine 2-(2,6-diisopropylphenoxy)-tetrahydropyran-6-yl dihydrogen phosphate complex, or disodium lauryl-imino-dipropionate-2-(2,6-diisopropylphenoxy)-tetrahydropyran-6-yl dihydrogen phosphate complex.

28. (New) The method according to claim 11 comprising the following reaction:



wherein R¹, R², R³, R⁴ and R⁵ are each independently H or an alkyl group; R⁶, R⁷ and R⁸ are

each independently H or OH; and n and m are each independently in the range of 0 to 8.

29. (New) The method according to claim 28 wherein Compound (II) is 2-(2,6-diisopropylphenoxy)-tetrahydropyran-6-yl, dihydrogen phosphate, or 2-(2,6-diisopropylphenoxy)-3,4,5-trihydroxy tetrahydropyran-6-yl, dihydrogen phosphate.

30. (New) The phosphate derivative of a phenolic hydroxy compound according to claim 15 wherein the Compound (II) complex is arginine 2-(2,6-diisopropylphenoxy)-3,4,5-trihydroxy tetrahydropyran-6-yl dihydrogen phosphate complex, arginine 2-(2,6-diisopropylphenoxy)-2-hydroxy ethylphosphate complex, arginine 2-(2,6-diisopropylphenoxy)-3,4,5-trihydroxytetrahydropyran-6-yl dihydrogen phosphate complex, arginine 2-(2,6-diisopropylphenoxy)-2-hydroxy ethylphosphate complex, or arginine 2-(2,6-diisopropylphenoxy)-tetrahydropyran-6-yl dihydrogen phosphate complex.

31. (New) The phosphate derivative of a phenolic hydroxy compound according to claim 16 wherein the Compound (II) complex is arginine 2-(2,6-diisopropylphenoxy)-3,4,5-trihydroxytetrahydropyran-6-yl dihydrogen phosphate complex, arginine 2-(2,6-diisopropylphenoxy)-tetrahydropyran-6-yl dihydrogen phosphate complex, or disodium lauryl-imino-dipropionate-2-(2,6-diisopropylphenoxy)-tetrahydropyran-6-yl dihydrogen phosphate complex.

32. (New) The method according to claim 11 wherein the phenolic hydroxy compound is selected from the group consisting of adrenaline, analgesics, and mixtures thereof.